

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO.  YOR919990210US2 (8728-282 CON)		SERIAL NO. <b>10/ 807,628</b> Not Yet Assigned	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (Use several sheets if necessary)				APPLICANT  Joseph Gil et al.			
				FILING DATE  Concurrently Herewith		GROUP ART UNIT  <b>2193</b>	

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<b>TF</b>		5,794,041	8/11/98	Law et al.			
<b>TF</b>		5,590,327	12/31/96	Biliris et al.			

FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
							YES    NO

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)		
<b>TF</b>		1 Pugh et. al., "Two-directional record layout for multiple inheritance", Proceedings of the ACM SIGPLAN '90 Conference on Programming Language Design and Implementation, White Plains, NY, June 20-22, 1990, pp. 85-91  2 Erik Ernst, "Propagating Class and Method Combination", Proceedings of the 13 <sup>th</sup> European Conference on Object-Oriented Programming (ECOOP'99), Lecture Notes in Computer Science, Lisbon, Portugal, June 1999, R. Guerraoui, ed., Springer Verlag, pp. 67-91
<b>TF</b>		3 Burke et. al., "A Framework for Evaluating Space and Time Overhead for C++ Object Models", Research Report RC 20421, IBM, TJ Watson Research Center, March 1996, Declassified Jan. 1998, pp. 1-28  4 Cardelli et. al., "On Understanding Types, Data Abstraction, and Polymorphism", Computing Surveys, Vol. 17, No. 4, December 1985, pp. 471-522
<b>TF</b>		5 Gil et. al., "The Complexity of Type Analysis of Object Oriented Programs", Proceedings of the 12 <sup>th</sup> European Conference on Object-Oriented Programming (ECOOP'98), Lecture Notes in Computer Science, Brussels, Belgium, July 1998, E.Jul., editor, Springer Verlag, pp. 601-634  6 Carter et. al., "Universal Class of Hash Functions", Journal of Computer and System Sciences 18, (1979) pp. 143-154

EXAMINER	DATE CONSIDERED <b>6/9/07</b>
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\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(Form PTO-1449 [6-4])

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		APPLICANT  Joseph Gil et al.			
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							YES      NO

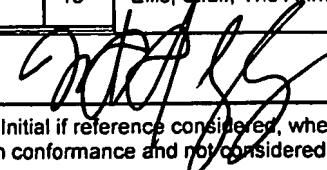
OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)		
<div style="font-size: 1.5em; font-family: cursive;">TF</div>	<div style="font-size: 1.5em; font-family: cursive;">1</div>	7    Chambers et. al., "Whole-Program Optimization of Object-Oriented Languages", Technical Report UW-CSE-96-06-02, U. of Wash., Dept. of Computer Science and Engineering, June 1996, pp. 1-70
<div style="font-size: 1.5em; font-family: cursive;">1</div>	<div style="font-size: 1.5em; font-family: cursive;">2</div>	8    Nackman et. al., "Base-Class Composition with Multiple Derivation and Virtual Bases", Proceedings of the Sixth Usenix C++ Technical Conference, Cambridge, MA, April 11-14, 1994, pp. 57-71
<div style="font-size: 1.5em; font-family: cursive;">1</div>	<div style="font-size: 1.5em; font-family: cursive;">3</div>	9    Karasick et. al., "The Architecture of Montana: An Open and Extensible Programming Environment with an Incremental C++ Compiler", Proceedings of the Foundations of Software Engineering (FSE'98), Orlando, FL., Nov. 1997, pp. 131-142
<div style="font-size: 1.5em; font-family: cursive;">1</div>	<div style="font-size: 1.5em; font-family: cursive;">4</div>	10    Garey et.al., "Computers and Intractability: A Guide to the Theory of NP-Completeness", W.H. Freeman and Co., pp. 1-15, 194-195, 1979
<div style="font-size: 1.5em; font-family: cursive;">1</div>	<div style="font-size: 1.5em; font-family: cursive;">5</div>	11    Tip et. al., "Class Hierarchy Specialization", Proceedings of the Twelfth Annual Conference on Object-Oriented Programming Systems, Languages, and Applications (OOPSLA'97), Atlanta GA, pp. 271-285, Oct. 1997 (also published in ACM SIGPLAN Notices 32(10), 1997)
<div style="font-size: 1.5em; font-family: cursive;">1</div>	<div style="font-size: 1.5em; font-family: cursive;">6</div>	12    S. Krogdahl, "Multiple Inheritance in Simula-Like Languages", BIT 25, pp. 318-326, 1984

EXAMINER <div style="font-size: 1.5em; font-family: cursive;">[Signature]</div>	DATE CONSIDERED <div style="font-size: 1.5em; font-family: cursive;">6/9/07</div>
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
<b>TH</b>		13	A. Myers, "Bidirectional Object Layout for Separate Compilation", Proceedings of the 10 <sup>th</sup> Annual Conference on Object-Oriented Programming Systems, Languages, and Applications (OOPSLA'95), pp. 124-139, Austin, Texas, USA, October 15-19, 1995 (also published in ACM SIGPLAN Notices 30(10), Oct. 1995)				
		14	Rossie, Jr., et. al., "An Algebraic Semantics of Subobjects", Proceedings of the 10 <sup>th</sup> Annual Conference on Object-Oriented Programming Systems, Languages, and Applications (OOPSLA'95), pp. 187-199, Austin, Texas, USA, Oct. 15-19 1995 (also published in ACM SIGPLAN Notices 30(10) Oct. 1995)				
		15	Sweeney, et. al., "A Methodology for Quantifying and Evaluating the Space Overhead in C++ Object Models", Computer Sciences/Mathematics RC 21370 (96227) (12/18/98) pp. 1-24				
		16	Stanley B. Lippman, "Inside the C++ Object Model", Addison-Wesley, second edition, 1996, pp. 82-107				
<b>TH</b>		17	B. Stroustrup, "The Design and Evolution of C++", Addison-Wesley, March 1994, pp. 257-276				
		18	Ellis, et.al., "The Annotated C++ Reference Manual", Addison-Wesley, Jan. 1994, pp. 195-237				
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							<div style="display: flex; justify-content: space-between;"> <span>YES</span> <span>NO</span> </div>

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)	
<div style="font-size: 1.5em; font-family: cursive;">7#</div>	<div style="border-bottom: 1px solid black; padding-bottom: 5px;">           19    Krall, et. al., "Near Optimal Hierarchical Encoding of Types", Proceedings of the 11<sup>th</sup> European Conference on Object-Oriented Programming (ECOOP'97) Lecture Notes in Computer Science, Jyvaskyla, Finland, June 1997, Mehmet Aksit, Satoshi Matsuoka (eds.), Springer Verlag, pp.128-145         </div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;">           20    Flatt, et. al., "Classes and Mixins", POPL 98, San Diego, CA, pp. 171-183         </div>
<div style="border-bottom: 1px solid black; padding-bottom: 5px;">           21    Linton, et. al., "Interface Translation and Implementation Filtering", Usenix Association, C++ Technical Conference Proceedings, Cambridge, MA, April 11-14, 1994, pp. 227-236         </div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;">           22    B. Martin, "The Separation of Interface and Implementation in C++", Usenix Association, C++ Conference, pp.51-63, 1991         </div>	<div style="border-bottom: 1px solid black; padding-bottom: 5px;">           23    B. Stroustrup, "Multiple Inheritance for C++", European Unix System User's Group Conference, May 1987, pp. 189-207         </div>

EXAMINER <div style="font-size: 1.5em; font-family: cursive; display: inline-block; vertical-align: middle;">[Signature]</div>	DATE CONSIDERED <div style="font-size: 1.5em; font-family: cursive; display: inline-block; vertical-align: middle;">6/9/07</div>
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